

USDA Lifts Import Ban On Mexican Avocados

he U.S. decision to partially lift a long-standing ban on avocado imports from Mexico to the continental U.S. is viewed in some quarters as an early indicator of the U.S. approach to new disciplines on sanitary and phytosanitary measures under recent trade agreements. After 6 years of carefully evaluating the pest risks associated with importing Mexican avocados, USDA's Animal and Plant Health Inspection Service (APHIS) announced in February that it would allow entry of some Mexican avocados into the continental U.S. for the first time in 83 years.

Revision of Q56, the Fruit and Vegetables Quarantine, will allow shipments of avocados from certified groves in Mexico to be exported to 19 northeastern states and the District of Columbia from November through February, beginning in 1997. The public comment period that preceded the APHIS ruling yielded a wide range of opinions from various stakeholders on the advisability of revising Q56.

California and Florida avocado growers vigorously opposed entry of Mexican avocados. Representatives from the avocado industry acknowledge that wholesale prices for U.S. avocados are well above those for export-quality avocados from Mexico, but argue that the ban shields them from risk of pest infestation rather than competition.

On the other hand, U.S. agricultural exporters expressed concern that failure to revise Q56 would establish a stringent regulatory standard for risk management that would subsequently be adopted by other countries restricting access for U.S. exports of wheat, citrus, apples, peaches, cherries, and other products to foreign markets. Elected officials from some nonapproved states have expressed disappointment that their constituents would not have access to Mexican avocados, while brokers and shippers in border states have noted that partially lifting the ban would benefit their operations.

The revision of Q56, with its geographic and seasonal restrictions on Mexican avocado imports, will open less than 5 percent of the current national market to Mexico. Nonetheless, interest in this decision was heightened by the perception that it was an important indicator of how the new sanitary and phytosanitary (SPS) disciplines would guide U.S. import policy decisions.

Along with other major agricultural exporting nations, the U.S. strongly advocated international rules for the use of SPS measures in negotiations for the North American Free Trade Agreement (NAFTA) and the Uruguay Round Agreements (URA) of the General Agreement on Tariffs and Trade. The eventual decision to allow limited access to the U.S. market for some Mexican avocados after comprehensive study of the pest risks reflects USDA's commitment to basing phytosanitary policy on sound science, and to adopting risk-reducing measures that are least trade restrictive. These two principles are found in both trade agreements.

The Scientific Basis For Revising Q56

U.S. phytosanitary officials originally banned entry of Mexican avocados in 1914 when seed weevils—pests that destroy the seed and contaminate the flesh—were discovered in Mexican groves. During the 1970's, the government of Mexico twice petitioned USDA to lift the ban on avocados produced in certain regions, but U.S. authorities were not persuaded that the fruit could be safely imported.

In 1990 Mexico renewed its request, following several years of an export registration program administered by its plant quarantine authorities. The program had allowed participating Mexican growers to export avocados to Asian and European markets. In the view of Mexican phytosanitary officials, modern pesticides and cultural practices used in the registered groves had eliminated the rationale for total U.S. prohibition on Mexican avocados.

APHIS based its 1997 decision to modify Q56 on the results of research undertaken by USDA's Agricultural Research Service, as well as the results of its own quantitative risk assessment of nine "pests of quarantine significance." A quarantine pest is defined by the North American Plant Protection Organization as "a pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled."

APHIS studied the risks associated with the introduction of eight species of pests which are not present in this country. These included five species of "host specific" pests that attack only avocados, and three species of fruit flies. It also evaluated risks posed by a fourth species of fruit fly, *Anestrepha ludens* or Mexican fruit fly, which is present in this country (Federal or state authorities operate pest management programs in those areas to mitigate the risks).

Will Pests Be Imported Along with Avocados?

APHIS's risk assessment results indicated that with no regulatory controls except for standard port-of-entry inspections, a stem weevil outbreak might occur every 7 months, a fruit fly outbreak might occur once every 72 years, a seed weevil outbreak might occur every 95 years, and a seed moth outbreak might occur every 355 years.

The next step for APHIS was to evaluate the risks posed by importing Mexican avocados under a systems approach which featured the following safeguards.

- Host resistance to fruit flies. Fruit fly infestation of the Hass avocado is not known to occur outside the laboratory.
- Field surveys for stem and seed weevils and fruit flies.
 Orchards will receive or be denied certification for export
 on the basis of survey results. Surveys must show municipalities to be free of targeted seed pests at a 95-percent
 confidence level.
- Trapping and field bait treatments for fruit flies.
- Field sanitation practices, including routine removal of fallen fruit and pruning, to decrease the chances of weevil or fruit fly establishment.
- *Post-harvest safeguards*, such as tarps to cover fruit, and structural requirements for packinghouses (e.g., screens and double doors) to guard against fruit flies and other hitchhiking pests.
- *Winter shipping* to decrease the probability of escape and survival of hitchhiking pests.
- Packinghouse inspection and fruit cutting to detect weevils or fruit flies. If any pests are detected, the entire shipment will be rejected.
- Port-of-arrival inspection of fruit and certification documents.
- Limited distribution to the District of Columbia and 19 northeastern states: Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Delaware, Maryland, West

Virginia, Virginia, Ohio, Michigan, Wisconsin, Illinois, Indiana, and Kentucky. This reduces the likelihood that transported pests will survive, because of cold temperatures and the lack of suitable hosts in these states between November and February.

APHIS's quantitative risk assessment indicated that the statistical probability of avocados imported under this regulatory regime causing a seed pest or fruit fly outbreak would be less than once every 1 million years. A stem weevil outbreak might occur once every 11,402 years under this regulatory regime, according to APHIS's analysis.

Critics of this systems approach argue that it will not provide sufficient protection from the risk of pest infestation because of the economic incentives for Mexican producers and U.S. shippers to deviate from this regime, and because effectively monitoring compliance with the safeguards will require increasingly scarce public-sector resources. In response, USDA's plant health officials point out that administrative details of the program reduce or eliminate incentives to cut corners, while providing support for effective surveillance.

For example, the incentive to supplement shipments from approved orchards with avocados from other groves is diminished by the fact that if a seed pest is detected in a shipment, exports from the entire municipality will be cut off until eradication efforts have been successfully completed. Similarly, U.S. shippers who might be tempted to transship Mexican avocados from the northeastern states to points further west or south will find that in order to escape detection by USDA's Agricultural Marketing Service inspectors at terminal markets they would first have to remove a sticker from each individual avocado that indicates the fruit's origin.

In general, the fact that the Mexican industry is required to establish a trust fund that pays for on-site monitoring by APHIS employees at each stage of avocado production and distribution in Mexico will make it substantially more difficult for growers, packers, or shippers who might want to circumvent the safeguards.

First, APHIS assessed the probability of infestations without any regulatory controls beyond standard port-of-entry inspections. It then evaluated the efficacy of a "systems approach" to mitigate the risks of pest infestations. A systems approach comprises a sequential implementation of safeguards—e.g., a requirement to ship the fruit in sealed, refrigerated containers—which are designed to progressively reduce the likelihood of introducing injurious pests to an insignificant

level. Systems approaches are considered when an exporting region does not qualify as a pest-free area, and when post-harvest treatments to eradicate the pests degrade the fruit or leave unacceptable chemical residues.

The outcome of APHIS's quantitative risk assessment of a systems approach with nine specific safeguards indicated that Mexican avocados imported under this regulatory regime posed an insignificant

pest risk. The regime allows Mexico to export the Hass variety of avocado—a variety which exhibits a natural resistance to fruit fly infestation prior to harvest—*if* stringent criteria are met for monitored insect population levels; for harvesting, packing, and shipping practices; and for inspections.

Geographic and temporal restrictions on shipments of Mexican avocados constitute two other important safeguards that

further diminish the likelihood that quarantine pests could become established in the U.S. A hitchhiking pest which arrives in cold weather thousands of miles away from suitable host material would be unlikely to survive and become established in the importing region, which was an important factor in USDA's 1993 decision to allow Mexico to ship Hass avocados to Alaska.

The U.S. is not the only country willing to rely on a systems approach to mitigate plant pest risk. The U.S. exports citrus to Japan, plums to Mexico, and apples and pears to Taiwan under protocols that specify different systems approaches to minimize plant pest risk. APHIS also uses systems approaches to facilitate interstate commerce. For example, citrus fruit grown in areas of Texas that are seasonally infested with the Mexican fruit fly can be shipped to markets throughout most of the continental U.S. under the terms of a systems protocol (which identifies the requisite steps for mitigating risk).

Economic Impacts Of Revising Q56

Mexico's avocados are expected to be competitive in the U.S. market. Mexico is the world's leading avocado producer, accounting for about 40 percent of the world's production. Mexican growers typically produce between 700-800,000 tons of avocados each year, about four times the amount produced by the U.S. industry. However, most of Mexico's avocados are produced for the domestic market: their size, appearance, and provenance (from areas where pest risk cannot be satisfactorily mitigated) make them unsuitable for the international market. As a consequence, Mexican domestic avocado prices are substantially lower than international market prices, and Mexicans consume more than 95 percent of the domestic crop each year.

Even so, Mexico is still the world's second-largest avocado exporter, trailing Israel but ahead of the other four major exporters—South Africa, Spain, Chile, and the U.S. According to a study published by the American Farm Bureau, Mexico's ability to compete in international markets stems from land, labor, and water costs that are lower than its

competitors' and substantially lower than costs in California, which produces about 90 percent of the U.S. avocado crop.

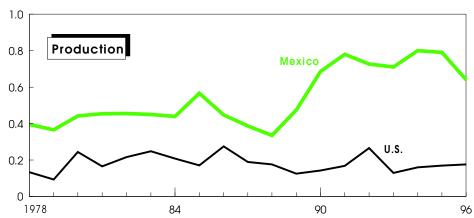
The cost differentials are reflected in a comparison of the wholesale price for California Hass avocados in New York City with the price of Mexican Hass avocados in Montreal, the closest terminal market to New York City which currently allows sales of Mexican avocados. USDA's Agricultural Marketing Service reports that the lowest quoted wholesale

prices for Mexican Hass avocados in Montreal in January, February, November, and December of 1995 ranged from \$0.18 to \$0.23 per pound, while the lowest quoted wholesale prices for California Hass avocados ranged from \$1.65 to \$2 per pound.

A USDA Economic Research Service study reports that U.S. avocado prices fluctuate markedly between years. Nonetheless, these price data suggest that Mexican growers will be able to

Mexico's Avocado Production Tops U.S. Output By Four to One . . .

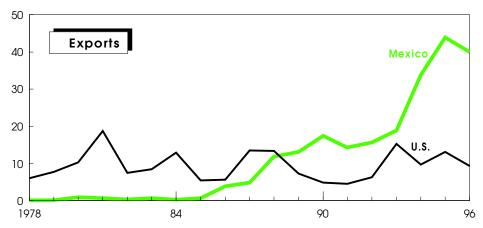
Million tons



1996 for e.c. ast. Sources: Agrostat, U.N. Food and Agriculture Organization; Foreign Agriculturd Service, USDA.

. . . and Its Export Volume Is Also Nearly Four Times Larger

1,000 tons



 $1996\ forecast.$ Sources: U.N. Food and Agriculture Organization; U.S. Customs Service; Foreign Agricultural Service, USDA.

Economic Research Service, USDA

profitably export avocados to the northern region of the U.S. even though they must pay a tariff of 3.58 cents a pound—which under NAFTA will be gradually phased out by 2003.

The segment of Mexico's industry that will be competing with U.S. growers is located in Michoacán, a state in southwest Mexico. Although Michoacán accounts for two-thirds of Mexico's output, only a small fraction of the industry there participates in the export registration program administered by Mexico's plant protection agency. These export-oriented Mexican growers have chosen to incur the additional costs of sophisticated grove management, packing, and shipping practices, in order to gain access to markets in Europe, Canada, and Japan.

This segment of the Mexican avocado industry planted new groves throughout the 1980's, principally with the Hass variety (the variety that accounts for 85 percent of Californian production). These trees have reached full bearing potential, heightening Mexico's interest in finding additional export markets.

The impact on the U.S. industry of allowing seasonal imports of Mexican avocados will be mitigated by the fact that Mexican growers will be competing with foreign as well as domestic sources of supply in the northeastern avocado market during the winter shipping season. The U.S. is a net importer of avocados, typically exporting approximately 5 percent of domestic production while importing approximately 10 percent. Chile exports more avocados to the U.S. than any other country, and in recent years has been the dominant supplier to the northeastern market during these 4 months.

California is the second-largest supplier in this market, although its winter shipments to northeastern markets never totaled 5 percent of California's output during the 1990-94 period. The Northeast is not the primary destination for California Hass avocados; approximately 80 to 90 percent of California's production is typically shipped to states outside the designated area. Moreover, the November-February period falls outside the peak harvesting

and shipping season for California Hass avocados—about 65 percent of the crop is sold between March and August.

APHIS's analysis of the economic impact of the Q56 revision supports the view that the regulatory change will have a limited impact on Californian avocado producers. APHIS analyzed the impact under different scenarios, varying the quantity of avocados Mexican growers would divert from other foreign destinations to the U.S. and the quantity of domestic avocados the U.S. industry would divert from the northeastern region to the nonapproved states. For example, if Mexican producers redirected 30 percent of the annual average of 1990-94 avocado exports to the approved states during November-February, consumers would benefit since prices in the approved and nonapproved states would fall by 25 and 2 percent. Producer losses would total approximately \$3.9 million.

APHIS's analysis indicated that estimated grower losses ranged from \$1.4 to \$6.4 million under the different scenarios, which represented 0.5 to 5.4 percent of the farm value of the California Hass avocado crop during the 1990-94 period. APHIS's analysis also indicated that estimated consumer gains could range from \$3.3 to \$19 million under different import scenarios. Under all scenarios, estimated consumer gains were larger than producer losses, with net economic benefit estimates ranging from \$1.9 to \$12.5 million.

The revision of Q56 is expected to have an even smaller economic impact on growers in Florida and Hawaii, which account for approximately 10 and less than 1 percent of U.S. avocado output. Florida growers are generally the thirdleading source of supply in northeastern markets between November and February, but market statistics indicate there is little substitution in consumption between the larger green-skinned avocado varieties produced in Florida (and California) and the higher priced Hass avocado. Consumer willingness to pay a large price premium for Hass avocados has been observed in terminal markets by analysts for numerous years, suggesting that consumers have a strong preference for Hass avocados over other avocado varieties.

High humidity levels in Florida prevent producers from growing the higher priced Hass variety. Instead, Florida primarily supplies a niche market of Central American and Caribbean immigrants on the east coast who prefer the larger greenskinned varieties.

A phytosanitary quarantine prevents Hawaiian producers from shipping their avocados to the mainland, so seasonal foreign shipments of Hass avocados to the Northeast will have no effect on that segment of the domestic industry.

New Disciplines on Sanitary & Phytosanitary Measures

Following APHIS's proposal to revise Q56, the agency held a series of hearings across the U.S. in 1995 to elicit comment from the public, which included risk assessment experts and university entomologists as well as growers and consumers. APHIS also solicited written remarks during an extended 105-day official comment period. A number of respondents expressed concern that APHIS appeared to have a "new mandate" under the recent trade liberalization agreements to facilitate international trade, a departure from its historical mandate to prevent the introduction and establishment of quarantine pests. Others posed a more direct question, asking if the O56 revision "resulted from" NAFTA.

Disciplines on the use of sanitary and phytosanitary (SPS) measures were included in the URA and NAFTA to protect and extend the degree of agricultural trade liberalization, at the insistence of major agricultural exporting nations, including the U.S. Exporting countries were concerned that, with the trade agreements effectively disciplining the use of other tariff and nontariff barriers to agricultural exports for the first time, importing countries would resort to the disingenuous use of health and safety measures to protect their producers from competition. While recognizing that each country has the sovereign right to adopt and enforce measures necessary to protect human, animal, or plant life or health, the agreements require that these measures adhere to certain principles.

The principal SPS articles in the URA and NAFTA lay out specific requirements for these measures to be:

- scientifically based—SPS measures should be based on an explicit scientific assessment of risks;
- nondiscriminatory—no variation should be applied among trading partners or between domestic and foreign goods except as justified by differences in assessed risks;
- least trade restrictive—although each country has the sovereign right to determine what level of SPS protection is acceptable, it should take into account the objective of minimizing negative trade effects; and
- transparent—governments must notify other countries of SPS measures which restrict trade and must respond to trading partners' requests for additional information.

Another article in the trade agreements provides for *regionality*—regulatory authorities must allow imports from pestor disease-free *areas* (or areas where the prevalence of pests or diseases is so low as to pose insignificant risk) *within* countries

If an exporting country successfully challenges an SPS measure that violates one or more of these articles before a NAFTA dispute settlement panel, the importing country must either rescind the measure or compensate the trading partner for the amount of trade lost.

In the view of the U.S., codifying SPS principles and practices in the URA and

NAFTA requires U.S. trading partners to adhere to the same professional standards as APHIS when formulating SPS policies. Since Congress first delegated the authority to USDA in 1912 to prohibit or restrict entry of foreign products to guard against quarantine pests, SPS decisions by the professional staff of APHIS (and its institutional predecessors) have always been based on the latest available scientific evidence on the risks. U.S. quarantine policy has also always been guided by the principle of "least drastic action" which instructs regulatory authorities to protect domestic agriculture from pests while imposing the fewest possible barriers on commerce and trade.

Because pest detection and eradication technology changes over time, quarantine policies can also be expected to change. The fact that a segment of the Mexican avocado industry had adopted innovations in chemical controls and cultural practices, combined with recent ARS research results about the resistance of Hass avocados to fruit fly infestation, supported APHIS' assessment that the risks associated with importing these avocados were lower than when last reviewed in the 1970's. The revision in Q56 reflected a change in actual risk factors and the understanding of those risk factors—not a change in APHIS' mandate to protect American agriculture.

The partial lifting of the ban on Mexican avocados, although in conformity with the new disciplines on the use of SPS measures, was not "caused" by NAFTA, but rather reflected USDA's long tradition of basing quarantine policy on sound

science. With the URA and NAFTA in place, the U.S. will now be able to oblige its trading partners to do the same. Donna Roberts, USDA-ERS, Geneva, Switzerland, 41-22-749-5245 droberts@ustr.gov

June Releases—USDA's Agricultural Statistics Board

The following reports are issued electronically at 3 p.m. (ET) unless otherwise indicated.

June

- 2 Crop Progress (after 4 pm)
- 3 Dairy Products
- 4 Broiler Hatchery Egg Products Poultry Slaughter
- 5 Minn.-Wisc. Base Month Price, Final 1994-96
- 9 Crop Progress (after 4 pm)
- 11 Broiler Hatchery
- 12 Crop Production (8:30 am)
- 13 Cattle on Feed Milk Production Turkey Hatchery
- 16 Crop Progress (after 4 pm)
- 18 Broiler Hatchery
- 20 Cold Storage
- Livestock Slaughter
 23 Crop Progress (after 4 pm)
- 24 Catfish Processing Chickens & Eggs
- 25 Broiler Hatchery
- 26 Cherry Production Peanut Stocks & Processing
- 27 Agricultural Prices Hogs & Pigs
- 30 Acreage (8:30 am) Grain Stocks (8:30 am) Crop Progress (after 4 pm)

U.S. & Mexican Avocado Sectors: A Comparison

Mexico is the world's largest avocado producer and second-largest exporter, accounting for about 67 percent of global production and 24 percent of world trade in 1995/96. Mexico currently exports about 7 percent of total production, mainly to Europe, Canada, and Japan. The U.S. is the second-largest producer of avocados (about 15 percent of world production) and the sixth-largest exporter (5 percent of global trade). The U.S. exports about 5 to 7 percent of production, with the EU, Japan, and Canada the most important markets.

Mexican per capita consumption is about 7 kilograms per person, compared with U.S. consumption of less than 1 kilogram. U.S. per capita consumption more than doubled between the early 1970's and the early 1980's, but has remained fairly constant since then. California has by far the highest per capita avocado consumption in the U.S., for two principal reasons: it is the main region of U.S. production and it has a large Hispanic population with an established preference for avocados.

The 19 northeastern states where Mexican avocados will be permitted under the recent APHIS ruling are estimated to consume 10,000-15,000 tons of fresh avocados annually and account for about 8 percent of domestic use. Avocados are used primarily in fresh salads, as toppings on soups, and as the main ingredient in guacamole. Avocados are rich in potassium and vitamin A and free of cholesterol, but relatively high in fat and calories.

In both countries, production is highly concentrated in one state and on one variety. Mexico produces mainly the Hass variety, with over 85 percent grown in the state of Michoacán near Mexico City. In the U.S. over 90 percent of all avocado trees are in California, with roughly half of U.S. production located in San Diego County. California produces mostly the Hass variety, which has a pebbly, dark green skin. Most of the remaining U.S. output is from Florida, mainly a variety of West Indian origin with a smooth, lighter green skin.

Hawaii also grows a small amount of avocados.

Avocado production requires a great deal of water. In San Diego County, avocado production relies on high-cost irrigation. In Michoacán, where only about half the orchards have irrigation systems, abundant rainfall gives Mexican producers an advantage in lower water costs.

At a national level, Mexican yields are typically 7 to 9 metric tons per hectare, although a mature orchard with 8-year-old trees generally averages 15 tons per hectare. California yields are slightly lower at about 5 metric tons per hectare.

Production of avocados can fluctuate a great deal from one year to the next, due to the crop's sensitivity to cold, leading to wide variations in price and in consumption levels. Some avocados also go through a bearing cycle that varies the production over several years. California is capable of producing substantial volumes of avocados year-round, although the peak season is usually from March to August, with the lowest levels from

September to December. Florida markets about 90 percent of its harvest between August and December.

In Michoacán, the primary harvest season is October to February, although production is year-round. Therefore, there is some complementarity in the Mexican and U.S. production cycles, although Mexico could pose new competition during January and February, when California has been nearly the sole supplier.

Mexico's avocado growers have been looking forward to the opportunity to export to the U.S. for several years. In fact, a number of new trees was planted with this goal in mind in the late 1980's and early 1990's, and these are now starting to bear fruit. Producer organization has undergone a series of changes, with the Michoacán Avocado Commission now the principal voice for growers. In an effort to improve export promotion, the Mexican industry is reportedly working with the Michoacán state government and the federal government to develop standards for product quality and labeling. Reportedly about 15

Chile Has Dominated U.S. Avocado Imports in the 1990's

Source: Foreign Agricultural Trade of the U.S., Economic Research Service. Economic Research Service, USDA

growers in Michoacán may eventually be able to ship avocados to the U.S., but only 2 or 3 may be able to take advantage of the opening initially. Michoacán growers estimate that 13,000 hectares in four municipalities in the state, capable of exporting 80,000 tons, could be approved by APHIS to export avocados to the U.S.

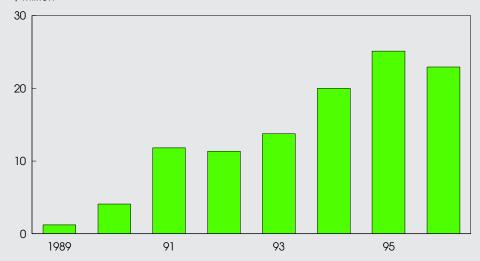
Poor weather in Mexico reduced the 1996/97 crop by approximately 20 percent, to 635,000 tons. Heavy rainfall, hailstorms, and cool temperatures in Michoacán during the flowering season caused fruit to fall early, and reduced both yields per tree and size of the fruit. For the 1997/98 season—the first for which the recent APHIS ruling will apply—Mexican growers interviewed by USDA's Foreign Agricultural Service expect output to bounce back 30 percent as higher yields often follow a low-yield year.

The California Avocado Commission's March estimate for 1996/97 state output was that the avocado crop would be up 3 percent. Total California shipments from November 1996 to March 1, 1997 were up 12 percent from the previous year, with prices down 3 percent. For the Hass variety, shipments were up 10 percent and prices down 5 percent. The first official USDA production estimate for 1996/97 will be released in July.

As with other seasonal crops, prices for Mexican avocados drop during the peak harvest season—November to February. However, these prices reflect the whole crop as marketed in Mexico City's main wholesale market. Export-quality fruit commands a higher price for its appearance and the special handling required. Mexican prices remain low during March and April as the crop continues to be marketed. Mexican avocado producers have a great deal of flexibility in timing of harvest because avocados can be stored on the tree, often for several weeks or months. Avo-cados ripen once they have been picked, softening within 3 to 4 days for fruit picked late in the season and 3 to 4 weeks for fruit picked early in the season.

U.S. Processed Avocado Imports from Mexico Have Grown Rapidly in the 1990's

\$ million



Source: U.S. Customs Service. Economic Research Service, USDA

Mexico's Competitiveness In the U.S.

Under the new APHIS rules, Mexico and Chile will find themselves in direct competition in the U.S. market during November and December. The U.S. imported 25,000 tons of fresh avocados worth \$23 million from all sources during calendar 1996, about 15 percent of domestic demand.

In the past few years, Chile has been supplying about two-thirds of U.S. avocado imports, mainly during September-December. During the 1990's, Chile exported an average 13,000 tons of fresh avocados to the U.S., with 40 percent entering during November and December. Chilean avocados face a U.S. tariff of 12.9 cents per kilogram, as opposed to the 7.9 cents/kg tariff for Mexico, and Mexico's tariff will be phased out by 2003 under NAFTA.

Some Mexican fresh avocados have already been entering the U.S. in recent years, coming by truck through Laredo, Texas. However, these avocado imports, which reached nearly 1,800 tons in 1996, have been bound by truck for

Alaska (where imports from Mexico have been permitted since 1993) or for Canada, or headed to U.S. ports for other re-export destinations.

In the last few years, while the partial lifting of the ban on fresh avocados was being developed, Mexican exporters have relied on pre-export processing to market their avocado products in the U.S. Processed avocado products include avocado pulp, avocado paste, and guacamole in consumer-ready packaging. Avocado pulp comes in tubs for use in restaurants and food processing.

Imports of processed avocados from Mexico have grown strongly in the last few years. The U.S.'s phytosanitary ban does not apply to processed avocados, as the husk and large seed have been removed. In fact, the value of processed avocado imports from Mexico is now equivalent to U.S. fresh avocado imports from all sources. Processed avocados face a 1997 tariff of 7.9 cents per kg, which will be eliminated by 2003. About 3 percent of Mexico's avocado crop goes to processing outlets. Daniel Plunkett (202) 219-0670 plunkett@econ.ag.gov